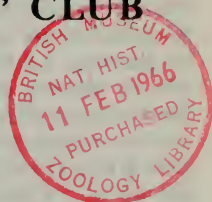


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The six hundred and thirty-first meeting of the Club was held at the "Clarence", Dover Street, London on the 18th January, 1966.

Chairman: Mr. R. S. R. Fitter

Members present: 21; guests 8.

The speakers were Mrs. B. P. Hall and Mr. Derek Goodwin, and Mrs. Hall has kindly supplied the following report on their illustrated talk:—

Some birds of central Australia

Mrs. Hall gave a short account of the 3rd Harold Hall Australian Expedition which spent six months in 1965 collecting birds for the British Museum, mainly in the central districts of South and Western Australia. In comparison with similar semi-desert areas in southern Africa the birds had been much scarcer; and surprisingly few were ground birds or adapted exclusively to arid conditions. It suggested that either semi-desert conditions were comparatively new to Australia, or that the continent as a whole had so few species for its area that there were plenty of vacant niches—the success of introduced mammals, even in the most arid parts, argued that there was sufficient food in these areas to support more vertebrates.

Mr. Goodwin spoke on behavioural aspects of some Australian birds. Many species seem able to do without water; this includes some, like the quail thrushes and whitefaces, that feed largely on seed. The Plumed Pigeon shows remarkable convergent resemblance to partridges. The crepuscular drinking habits of the Common Bronzewing Pigeon and Bourke's Parrakeet presumably evolved as a result of intense and long-continued predation by birds of prey at watering places. Some of the Meliphagidae show apparently pointless aggression towards other species.

Further breeding records from Zambia (formerly Northern Rhodesia) (No. 5)

by C. W. BENSON and CHARLES R. S. PITMAN

Received 29th October, 1965

Benson having left Zambia permanently, this is the final instalment in this series (for No. 4, see *Bull. Brit. Orn. Cl.*, 1964: 54–60). The data are arranged in the same manner as previously. Many of the records were

obtained by C. J. Vernon while on an expedition with Benson to the Zambian section of the Nyika Plateau during the first twelve days of 1964. Some of the results have already been published in *Bull. Brit. Orn. Cl.*, 1964: 124–132. We are also especially grateful to R. K. Brooke for information on particular points; to M. P. Stuart Irwin for notes on various specimens, and to A. J. Tree for many sight records. Any eggs mentioned as collected are in the British Museum, and birds in the National Museum of Zambia, Livingstone, unless otherwise specified. References to clutch-size in Benson *et al.* (1964) are for Rhodesia. As explained on page 32 therein, such data for Zambia and Malawi are not included. The following are co-ordinates for localities not on the map or in the gazetteer in Benson and White (1957):— Chifuwe, 12° 58' S., 25° 01' E.; Cholola, 17° 14' S., 23° 49' E.; Chunga, 15° 03' S., 26° 00' E.; Lukanga/Kafue confluence, 14° 22' S., 27° 11' E.; Moshi, 14° 26' S., 26° 10' E.; Mswebi, 14° 24' S., 27° 02' E.; Munyumbwe, 16° 39' S., 27° 47' E.; Neganega, 15° 45' S., 28° 02' E.; North Kafue Basin, 12° 18' to 14° 24' S., 27° 00' to 28° 50' E.; Ntemwa, 14° 25' S., 26° 03' E.; Sinjembele, 17° 16' S., 23° 03' E.

Nycticorax leuconotus (Wagler)

C. S. Holliday saw a nest containing two eggs near Livingstone, in a tree overhanging the Zambezi River, four feet above water level, in late October, 1957. J. M. Feely saw three fledged young, in a generally brownish plumage, with both their parents, all perched together in a *Salix* tree overhanging the Luangwa River at 12° 54' S., 20th June, 1964. The only previous Zambian breeding record is that by Benson & Pitman (*Ool. Rec.*, 1956: 9).

Anas capensis Gmelin

Coll. by hand two ducklings, still completely in down, about two weeks old, Liuwa Plain, 25th July, 1964 (Benson). They were on the edge of a shallow, drying up saline pan, in the middle of this large plain described by Traylor (*Ibis*, 1965: 137). Both parents were in attendance, and there were only these two young in the brood. One of them is in the National Museum, Bulawayo, and both Irwin and E. A. Zaloumis (the latter has kept many young Anatidae in captivity) agree with the estimate of its age. On the pan itself there was another brood of ten young of similar size to the first two. There was also a flock of thirteen birds, all apparently adult.

Benson & White (1957) give but few records of the occurrence of this species in Zambia, and an earlier breeding record which they quote from Barotseland is dubious. Benson (*Ostrich*, suppl. 3, 1959: 9; *Occ. Papers Nat. Mus. S. Rhod.*, 24B, 1960: 344) gives records of small numbers on Lochinvar Ranch in July and November, and has seen it on the following further occasions there:— pair, 13th November, 1962; two pairs (in the case of one, the birds chasing each other, as if courting), 7th May, 1963; pair, 16th August, 1963. He also saw three at a pan on the Matabele Plain, south-western Barotseland, 19th July, 1964 and one there nine days later. The species seems to be largely confined in Zambia to the relatively dry south-western part, and its discontinuous distribution has already been commented on by Benson & White (*Proc. 1st Fed. Sci. Congr.*, Salisbury, 1960: 211).

Porphyrio alleni Thompson

P. J. Wright found a nest containing a single egg at Chunga, 11th February, 1963. Three days later there was a full clutch of C/4, the nest still holding C/4 on 2nd March. The eggs, which were not collected, measured 36 x 25, 38 x 25, 35 x 25, 36 x 25 mm. The parents were clearly seen at the nest, and identified for certain by the patch of bare blue skin on the forehead. The nest was a deep cup, into which the immediately surrounding grass had been woven, on the edge of a pool in inundated grassland, 50 feet from the bank of the River Kafue. Tree saw two adults, one of which was caught and ringed, accompanied by a fully grown young bird at Mswebi, 30th January, 1965. The same day, at the Lukanga/Kafue confluence, he saw two adults accompanied by three fully grown young. He has seen such young on seven other occasions in the North Kafue Basin, in February and March. For the only previous Zambian breeding records, see Benson & White (1957), that from near Mumbwa being amplified somewhat by Benson & Pitman (*Bull. Brit. Orn. Cl.*, 1959: 16).

Benson & Irwin (*Puku*, 3: 46-50), considering southern Africa as a whole, show that *Gallinula angulata* Sundevall is essentially only a breeding visitor, present in the rains from about December to April, inhabiting temporarily inundated grasslands. *P. alleni* is more an inhabitant of permanent swamps, and might therefore be expected to be resident. However, the following data are in keeping with it being migratory:— (a) Irwin reports that all nineteen specimens in the National Museum, Bulawayo, from Zambia, Malawi, Rhodesia and Bechuanaland, were collected during December/April; (b) In the North Kafue Basin during 1963/65, Tree has seen one or more individuals on twenty-two separate occasions, all records falling between 19th December and 13th April, likewise in Zambia generally Benson on twenty occasions between 30th December and 26th April; (c) Benson (*Ibis*, 1947: 565; 1951: 82), gives two records from Malawi for December of birds out of their normal habitat. But the following data suggest that it cannot be more than a partial migrant, or perhaps more likely merely with quite local movements:— (a) Dr James Bond reports that the date of one of the two specimens recorded by de Schauensee (1951) is 21st October (the other 9th April); (b) Benson saw one on Chisenga Island on 21st September, 1953, another there on 2nd October, 1960; (c) in Malawi, Paget-Wilkes (*Ibis*, 1928: 728) found eggs in September and November (these records were inadvertently omitted in Benson *et al.*, 1964), and Benson & Benson (*Ann. Trans. Mus.*, 21(2), 1949: 163) and Benson (*Ibis*, 1942: 208) give records of birds for July and August; (d) in the southern Congo, Verheyen (1953) collected six specimens in August.

Porphyrio porphyrio madagascariensis (Latham)

The egg-laying data in Benson *et al.* (1964) for Rhodesia, Zambia and Malawi show a considerable spread through the year, from January to October, and in addition Brooke tells us that there is a C/2 fresh and a C/4 set collected by J. A. Cottrell at Mongu on 10th April, 1935, in the Queen Victoria Museum, Salisbury. It is unlikely that this swamp-dweller has any movements at all. Neave (*Ibis*, 1910: 89) collected a specimen at Lake Young on 1st November; Brelsford (*Ibis*, 1947: 68) noted it in

Bangweulu in November/December; Benson (*Occ. Papers Nat. Mus. S. Rhod.*, 21B, 1956: 6) gives records for various months; M. A. Traylor tells us that there is a specimen in the Chicago Natural History Museum collected by E. L. Button on 25th October; Tree saw one near Kitwe on 5th September and there are specimens from Barotseland in the National Museum, Bulawayo, collected in August and September. In the southern Congo, Ruwet (*Rev. Zool. Bot. Afr.*, 69(1-2), 1964: 22) found it to be resident at Lake Lufira, and Verheyen (1953) collected five specimens in November/December.

Clamator jacobinus serratus (Sparman)

Coll. one egg, with a C/1 of *Pycnonotus barbatus layardi* Gurney, both fresh, Livingstone, 6th December, 1964 (R. C. Hart). The parasitic egg is white and glossy, and measures 24.8 x 21.7 mm. A white, rather than a blue egg is to be expected in this locality, judging from figure 4 in Friedmann (1964), though (p. 52) he records a blue egg from Bulaya, north-eastern Zambia. A young bird with wing 71, tail 33 mm. only, was collected 14 miles west of Livingstone, 5th March, 1964, but the foster-parent was not identified.

White & Winterbottom (*Check list bds. N. Rhod.*, 1949) give four records of the occurrence of this species as early as October, and Brelsford (*Ibis*, 1947: 71) gives one for 3rd October. At Kaputa, in the Mweru Marsh, Benson heard one calling at night on 13th October, and saw two as late as 18th May, both records being in 1956. Brooke (in MS for *Puku*, 4) records it from the Kafue National Park for as early as 15th October. Tree has twenty-two sight-records (of one to three individuals) between October, 1959 and March, 1965, his earliest seasonal dates being 20th and 23rd October, 1959 and 24th October, 1960, all from eastern Lusaka District; his latest 9th April, 1962, from Feira. He saw a lone black phase individual in the Mpika District on 20th February, 1960; another such between Samfya and Fort Rosebery, 31st March, 1964. For the only other Zambian record of this phase (specimen from Livingstone, 19th October), see Friedmann (1964: 86) and Benson (*Occ. Papers Nat. Mus. S. Rhod.*, 24B, 1960: 345), the latter noting that it was fat, and might still have been on migration. Irwin reports that there are now sixteen specimens of this species in the National Museum, Bulawayo, the earliest being 19th October (the Livingstone specimen cited above) and 27th October (from Bulaya), the latest 27th March. There are also fifty-seven Rhodesian specimens, the earliest 1st November, the latest 24th April. The black phase specimen from Malawi mentioned by Friedmann (1964: 86) is from Port Herald, and is dated 19th March, 1956.

Clamator levaillantii (Swainson)

Coll. fledged young bird, Cholola, 19th March, 1964, under the parental care of a *Turdoides jardineii tamalakanei* de Schauensee (Benson). W. F. Bruce-Miller observed another such fledgling being fed by a pair of *Turdoides leucopygia hartlaubii* (Bocage) in his garden near Choma, 20th January, 1963. The cuckoo imitated the babblers' calls very well, as well as giving a few of its own calls.

Friedmann (1964: 87), in discussing the movements of this species, gives the earliest spring date for Northern Rhodesia as 8th November, the

latest autumn date as 4th May, this information apparently being derived from Brelsford (*Ostrich*, 13, 1942: 40). White (*Ibis*, 1945: 322) gives scattered records from Mwinilunga between September and February and in May. Brelsford (*Ibis*, 1947: 71) heard one in the Bangweulu area on 3rd October. De Schauensee (1951) records a specimen for 7th October. Benson saw one at Chunga on 11th September, 1959, another near Fort Rosebery, 22nd September, 1960. Tree has nine sight-records from the same period as for his records of *C. jacobinus*, his earliest being 24th October, 1963, from Lochinvar, his latest 10th April, from Abercorn, though Vernon saw one at Solwezi as late as 2nd May, 1964, and Pitman (*Faunal Survey N. Rhod.*, 1934: 210) one at Kasama even on 9th May. Irwin reports that there are thirty-five specimens in the National Museum, Bulawayo, the earliest being 24th September (from Kabompo), 26th and 30th October (both Serenje District), the latest 6th May (two specimens, Chilanga and Munyumbwe). There are also twenty-four Rhodesian specimens, the earliest being 10th, 22nd, 25th and 29th October, the latest 15th, 25th and 27th May, and 6th June.

Bubo lacteus (Temminck)

On 26th July, 1964, on Lochinvar Ranch, J. M. E. Took examined a single egg in the flattened down top (so as to form a well marked cup) of an old nest of a Hammerkop (*Scopus umbretta bannermani* C. Grant), in an *Acacia albida* tree, on a horizontal branch, 14 feet from the main trunk, 20 feet above the ground. One of the parents was flushed from the nest, and its mate was nearby in a *Euphorbia* tree. The egg appeared to be very fresh. McLachlan & Liversidge (*Bds. S. Afr.*, 1957) state that the egg is "rough and pitted", but Took noted that this egg was neither, being of the texture of that of *Strix aluco* Linnaeus, for example. Pitman has handled a few of this owl's eggs, none of which has been "rough and pitted". H. W. James informs us that there are two clutches collected by Cottrell in the Queen Victoria Museum, Salisbury, as follows:— C/1 fresh, Neganega, 9th July, 1939; C/1 set, Mazabuka, 4th July, 1941. Measurements are 65.8 x 53.6 and 60.1 x 48.7 mm. Both were from old nests of *Aquila rapax rapax* (Temminck) in vleis *Acacia* trees. For the only two previous Zambian breeding records, see Benson (*Black Lechwe*, 2(5), 1960: 157).

Caprimulgus natalensis mpasa Smithers

Coll. C/2. Moshi, from *Echinochloa* grassland on edge of airstrip, 24th September, 1963 (Wright). The accompanying photographs show the parent and the eggs. The eggs, although originally found nine days previously, were still relatively fresh when collected. They measure 27.3 x 21.5, 29.1 x 21.6 mm., and are distinctive, smooth with slight gloss, whitish or ivory, one with a faint pinkish tinge; markings indistinct, irregular grey spots on shorter egg, and a few specks of light burnt amber very sparingly on underlying faint dull violet spots all over on the longer. Following Hall (*Bull. Brit. Mus. (Nat. Hist.)*, 6(7), 1960: 411), the subspecies may be *mpasa*.

Lynes (*Rev. Zool. Bot. Afr.*, 31(1), 1938: 111) collected a C/2 nearly fresh at Sandoa, in the southern Congo, 9th September.



The incubating *Caprimulgus natalensis* and the eggs.

Photographs by P. J. Wright

Indicator indicator (Sparrman)

Coll. one egg with a C/3 of *Ceyx picta natalensis* (Smith), all four eggs fresh, Livingstone, 21st October, 1963 (D. Swanepoel). The eggs were in the usual nesting site for *C. picta*, i.e. at the end of a horizontal tunnel. This had been excavated into the side of a pit, in *Baikiaea* woodland. The eggs of *C. picta* are white, rounded, glossy and nest-stained, and measure 18.3 x 15.3, 18.0 x 15.0, 18.2 x 15.1 mm.; the other, which is attributed to *I. indicator* (the similarly sized *I. variegatus* Lesson is unknown in the

Southern Province or Barotseland), is similar but not so glossy, and measures 22.5 x 18.1 mm. Friedmann (*Bull. U.S. Nat. Mus.*, 208, 1955; *Proc. U.S. Nat. Mus.*, 108 (3404), 1958) gives no record of *C. picta* being parasitised by any species of honeyguide.

Phyllastrephus flavostriatus alfredi (Shelley)

Coll. C/2 fresh, Nyika Plateau *ca.* 6,400 feet, 5th January, 1964 (Benson). Eggs ovate, smooth, with slight gloss; pale brownish-flesh with rich pinkish suffusion, two-thirds up the eggs a very narrow girdle of blackish-brown scribblings and scrawls on underlying medium dark grey; size 23.9 x 16.1, 23.7 x 16.2 mm. The nest was a shallow cup, decorated with dead fallen leaves on the outside, and slung in the small outer branches of a sapling, about four feet above the ground. For previous breeding records from the Nyika Plateau as a whole, see Benson (1951: 93; *Bull. Brit. Orn. Cl.*, 1952: 81)

Platysteira peltata mentalis Bocage

At Moshi, 8th August, 1963, Wright watched a pair building a nest 20 feet up in a thicket on a termite mound. In the same locality and type of habitat, 1st November, 1964, he found another nest 20 feet up, containing a single young bird only just hatched, still quite naked, being fed by both parents.

Cossypha caffra iolaema Reichenow

Coll. C/2 about two-thirds incubated, Nyika Plateau *ca.* 6,500 feet, 5th January, 1964 (Vernon). Eggs typical and bluntly oblate; smooth with slight gloss; indistinct, very pale bluish-green ground, with general creamy appearance from the profuse, tiny, very pale buffy-brown markings all over, on underlying, barely perceptible pale lilac-grey; size 23.4 x 16.1, 22.4 x 16.3 mm. This and another nest nearby, also containing C/2, were bulky cups of the needles of an introduced *Pinus*, dry plant stems and leaves, lined inside with fine wiry materials, placed against the trunks of *Pinus* trees in a windbreak, some six feet above the ground. Five other empty nests were found by Vernon in the vicinity. He also found the following further nests on the same visit to the Nyika:— 4th January, one containing three young about four days old; 6th January, one with C/2, one egg of which had hatched the following day; 11th January, one with two young, to leave the nest within a couple of days. Also, G. S. Keith noted a nest with C/2 on the Nyika, 26th December, 1964. With the possible exception of the second C/2 for 5th January, all the records of occupied nests point to egg-laying in December. All of the twenty-two records for Rhodesia and Malawi in Benson *et al.* (1964) are for September/December, with a peak apparent in November.

Chloropeta similis (Richmond)

Coll. C/2 fresh with female parent, without any further egg to lay, Nyika Plateau *ca.* 6,700 feet, 9th January, 1964 (Vernon). Eggs ovate, rather rounded, somewhat elliptical, smooth and dull surfaced; light pinkish with a few discrete tawny spots and specks, mainly around or on large end, on underlying very scanty, almost imperceptible grey; size 18.1 x 14.2, 17.9 x 13.9 mm. Two days previously there was only one egg, and on 2nd January the nest was still being built. It was a bulky cup of dry grass, lined with very fine materials, and near the top of a 7-foot high

Philippia bush on the edge of rank secondary bush growth by a stream. Another nest found by Vernon on 11th January was built in between four upright stems of a herb, four feet up, among low plants and bushes on a mound beside a stream. It contained one young with feather-tracts just starting.

Differences in the behaviour and ecology of this species and *C. natalensis* Smith, which occur alongside each other on the Nyika, are being discussed by Keith and Vernon in a separate paper.

Apalis thoracica youngi Kinnear

Coll. C/2, Nyika Plateau ca. 6,500 feet, 3rd January, 1964 (Vernon). This clutch is not available, but Vernon noted that one egg was heavily incubated, the other infertile. The nest was a dome made of mosses, lichen and fibrous materials, lined with very fine grass, in a *Philippia* bush among bracken growth on the edge of a stream. For breeding records of *youngi* from Malawi, see Benson & Benson (*Ann. Trans. Mus.*, 21(2), (1949: 171) and Benson (1951: 99).

According to O. P. M. Prozesky, there is a C/2 in the Transvaal Museum collected by R. E. Shannon in the Mkushi District (west of the Luangwa Valley) in January, 1944, while Brooke tells us that there is another C/2 collected by Shannon in this district, on 10th January, 1943, in the Queen Victoria Museum, Salisbury. On distributional grounds there is no reason to doubt these records, since Benson & White (1957) record the species from between Serenje and Danger Hill, and Keith and Vernon saw it on the Mkushi River at 13° 33' S., 29° 41' E., 3rd and 18th December, 1964. The subspecies in this area west of the Luangwa Valley is *A. t. whitei* Grant & Mackworth-Praed.

Bradypterus cinnamomeus nyassae Shelley

Coll. C/2 hard set, Nyika Plateau ca. 6,700 feet, 8th January, 1964 (Vernon). Eggs rather rounded, smooth and dull surfaced; pale pinkish-cream, thickly and finely peppered all over pale fuscous on underlying pale grey, with heavy concentrations of both markings at top of large end; size 20.7 x 16.3, 19.9 x 16.3 mm. Nest a bulky deep cup of dry grass and leaves, lined with fine grass stems, in the side of a rank tuft of grass in thick growth on the edge of a stream, flowing through boggy ground away from a patch of evergreen forest, some 150 yards away. Although neither parent was collected, it is reasonable to attribute these eggs to *B. cinnamomeus*, not the very similarly coloured *B. mariae* Madarasz, four specimens of which were collected on the same visit in the interior of evergreen forest, four of *cinnamomeus* outside. Such an ecological difference in these two species, where they occur together, is also noted by Benson (*Check list bds. Nyasaland*, 1953). Further west in Zambia, however, where *mariae* is unknown, *cinnamomeus* inhabits very largely the forest interior (for generalised localities, see Benson & Irwin, *Arnoldia (Rhodesia)*, 1(29), 1965).

Cisticola ayresii ayresii Hartlaub

Coll. C/3 fresh, Nyika Plateau ca. 7,000 feet, 8th January, 1964 (Vernon). Eggs ovate, somewhat rounded to elliptical, smooth and slightly glossed, pale blue, discretely and sparingly speckled and spotted blackish-brown on a very little underlying pale dull purplish-slate, markings mainly in the

form of a disconnected girdle around larger end; size 15.1 x 11.9, 14.8 x 11.9, 15.3 x 11.5 mm. Nest in open grassland, a small oval of grass, built into a sparse tuft of grass, the living grass bowered over to hide the nest. Vernon also noted a nest under construction, 7th January.

Cisticola lais semifasciata Reichenow

Coll. C/3 about one-third incubated, Nyika Plateau *ca.* 6,500 feet, 7th January, 1964 (Vernon). Eggs ovate to elliptical, smooth with slight gloss; pale blue, finely, faintly and sparingly specked all over very pale tawny, on almost imperceptible grey, with a tendency to form a girdle on cap at large end; size 16.3 x 12.2, 16.3 x 12.1 mm.; one broken. Vernon also collected a C/3 about three-quarters incubated on 4th January, and noted the two following further nests:— 7th January, two young about one week old; 9th January, three young a few days old. General comparisons between this species and *C. njombe* Lynes have already been made by Vernon (*Bull. Brit. Orn. Cl.*, 1964: 124–128). The eggs of *njombe* are described in detail by Pitman (*ibid.*: 130), and those of *lais* do not seem certainly distinguishable.

Cisticola brachyptera isabellina Reichenow.

Coll. C/1 infertile, with one young almost fully feathered, Nyika Plateau *ca.* 5, 800 feet, 5th January, 1964 (Vernon). Egg ovate, smooth, slightly glossed; light turquoise, sparingly specked all over light fuscous on underlying, scarcely perceptible, very pale lilac-grey; size 15.8 x 11.8 mm. This egg is in fact a small replica of eggs of *C. nigriloris* Shelley described by Pitman (*Bull. Brit. Orn. Cl.*, 1964: 131). Nest a small ball of dry grass, lined throughout with plugged down, placed five inches up in a small plant in grassland dotted with *Protea* bushes.

Vernon also recorded a nest containing C/2 on 12th December, 1964, at Mporokoso, where the subspecies is *C. b. loanda* Lynes.

Hirundo atrocaerulea Sundevall.

Vernon noted a nest containing C/3, another containing a single young bird, on the Nyika Plateau, 10th January, 1964. They were cups made of mud-pellets, lined with fine grass and feathers, rather shallow and frail, and placed against banks, under slight overhangs along a stream through an open bog. Four other unoccupied nests were seen on the same stream. Probably the season was already almost finished, see data for Rhodesia and Malawi in Benson *et al.* (1964).

Irwin has commented on four specimens from the Nyika, whose particulars and measurements in mm. are:—

| Sex | Date | Wing | Outer rectrices | |
|-----|---------------|------|-----------------|-----------|
| | | | outermost pair | next pair |
| ♂ | 31st December | 116 | 172 | 56 |
| ♂ | 1st January | 113 | 144 | 52 |
| ♂ | 7th January | 111 | 50 | 45 |
| ♀ | 11th January | 107 | 65 | 46 |

The first two specimens are adult. The third is a juvenile. On the upper side it is indistinguishable from the two adults, but on the under side is considerably less metallic blue, with an admixture of sooty black. The

fourth, which is still younger, differs from the adults in having the metallic sheen on the crown and mantle much duller, while below it is an earthy brown on the throat and chest, sooty black on the abdomen, with only the faintest trace of metallic blue sheen. Excepting the length of the outer rectrices, it probably does not take very long for the juvenile to assume a plumage similar to that of the adult.

Lanius souzae souzae Bocage

Coll. C/2 fresh with female parent, Chifuwe, 5th October, 1963 (Jali Makawa p.p. Benson). Eggs ovate, smooth, dull surfaced; off-white, very finely specked and peppered, mainly rather sparingly all over, pale buffy-brown on underlying pale lilac-grey, with broad girdle around larger end; size 20.1 x 16.2, 20.3 x 16.1 mm. Took noted a nest containing C/3 near Lusaka, 27th September, 1964. The eggs were pale green-grey, freckled, more heavily around the thick end, with grey. Took noted that they were not blotched, and not at all shrike-like. He also found a nest containing three young about five days old near Lusaka, 8th December, 1964, and Mrs. M. Aspinall saw two fledged young there, 27th October, 1963, well able to fly, but being fed continually by their parents, who were flying down to ground level to hawk insects.

Judging also from twelve earlier records in Benson *et al.* (1964), it seems that egg-laying occurs essentially in the hot pre-rains. However, there is one record which has been overlooked, from Malawi, of a female in breeding condition collected near a half-built nest at Nyambadwe, near Blantyre, as late as 18th December (Belcher, *Ool. Rec.*, 2(2), 1922: 41). Clutch-size seems seldom to be as large as four, the information from eight of these twelve records being as follows:— eggs 3, 3, 4; nestlings 3, 3, 3; fledglings 2, 2. The four other records are derived from oviduct or ovary examination, or the number was not recorded. The C/4 is from Benson (*Ibis*, 1942: 321), and has been confirmed from his original notes. Vincent (*Ibis*, 1949: 128) gives the clutch-size as two or three, more often three, at Elisabethville, in the Katanga. He gives measurements of thirteen eggs, so must have had at least five clutches.

The most usual clutch-size for *L. collaris* Linnaeus in Rhodesia is four (Benson *et al.*, 1964), and it might be supposed that this species has a larger clutch-size than has *souzae*, unknown south of the Zambezi Valley. However, only three records for *collaris* of as large as four are available from Zambia and Malawi, as follows:— Lodjwa, 21st October (Benson, *Ibis*, 1942: 320); Broken Hill, 16th October, 1932 (Pitman); Kasama, 4th December, 1958 (Vernon). Vincent (*Ibis*, 1949: 126) found that at Elisabethville the full clutch was in every case three.

Tchagra minuta anchietae (Bocage)

Benson found a nest on the Nyika Plateau ca. 6,300 feet (higher than which it is probably absent), 11th January, 1964, containing a single young bird still almost naked. The nest was an open cup, three feet above the ground, in rank grass growth by a stream. Excellent views were obtained of both parents. Vernon found a nest at Ngitwa, between Kasama and Mporokoso, 13th December, 1964, three feet up in a sapling, in rank grass on the edge of a dambo. It contained two young about one week old. Benson & White (1957) give a record of egg-laying at Ndola in December, and this is the only previous Zambian breeding record, though Vincent

(*Ibis*, 1949: 135) gives records indicating egg-laying at Elisabethville in January and February.

Parus leucomelas insignis Cabanis

Coll. C/2 fresh, Solwezi, 2nd October, 1963 (Jali Makawa p.p. Benson). Eggs ovate and rounded, smooth without gloss; white, boldly freckled all over chestnut on underlying shades of grey, with medium concentrations at top of large end; size 19.3 x 14.4, 19.1 x 14.3 mm. Brooke saw a fledged juvenile begging food from an adult at Ntemwa, 26th October, 1962. Vernon saw a party of five at Mporokoso, 12th December, 1964, of which at least one was a juvenile, begging and receiving food. He also noted a C/3 at Bulaya, 11th December, 1964, in the hollow dead trunk of a small tree, only one foot above the ground. R. I. G. Attwell found young in his garden at Chilanga on 10th December, 1961. They left their nesting hole on 5th January, the fledging period thus being no less than about twenty-six days. *P. niger* is also known at Chilanga, but Attwell satisfied himself from comparison with preserved specimens of both species that his birds were *leucomelas*. A record from L. Trollope of C/4 which hatched on 7th or 8th October, 1961, and from T. R. H. Owen of nest-building on 12th/14th September, 1963, a parent tightly incubating ten days later, both records from near Ntemwa, in the Kafue National Park, are presumably also both referable to *leucomelas*, since Brooke, in a list of the birds of the Park (MS for *Puku*, 4), does not record *niger* further up the Kafue River than about 14° 50'S.

Lamprotornis australis australis (Smith)

Benson found a nesting hole at Sinjembele, in old cultivation, 3rd April, 1964. It contained two young still almost naked, about four days old. They had the interior of the mouth dull yellow, the outside of the bill white, with a well marked gape-flange. Their stomachs were full of grasshoppers, and each also contained some five fruit-seeds of diameter about 5 mm. The entrance to the nesting hole was 15 feet up a dead *Acacia giraffae* tree, the hole going down about 2½ feet.

Mackworth-Praed & Grant (*Bds. s. third Afr.*, 2, 1963) record breeding in the Transvaal in November and in South-West Africa in March. The only original references traced are from Roberts (*Journ. S. Afr. Orn. Union*, 9(1), 1913: 31) (fresh egg at Platriver, 18th November) and Hoesch & Niethammer (*Journ. Ornith.*, suppl., 1940: 309) (two nests with eggs at Okahandja, March). Like *L. mevesii* (Wahlberg) (see Brooke, *Bull. Brit. Orn. Cl.*, 1965, 85, p. 139), it may be a rains breeder, even though at Sinjembele in this particular season there had been no rain in February and less than one inch in March.

Nectarinia famosa cupreonitens Shelley

Coll. C/2 fresh, summit ridge of Mafinga Mts. ca. 6,800 feet, 24th June, 1958 (I. R. Grimwood). These eggs were mislaid shortly after their collecting, and have only recently been traced. Neither parent was seen at the nest, which was in an exposed position on the edge of a clump of bracken-briar growth. It was also collected, and sent to J. G. Williams, who found that it agreed exactly with Kenya-taken nests of this species, C/2 also indicating *famosa* (males of which in full green dress were collected by Grimwood on the same day in the vicinity) rather than *kilimensis*, the only likely alternative in this locality, but for which C/1 is normal (see

below). The eggs are ovate, slightly elongate, smooth with slight gloss; dark buffy-brown on whitish ground, marked profusely and rather streakily all over, on underlying shades of grey; also thickly all over; size 17.6 x 12.3, 16.6 x 12.0 mm. They are typical of *famosa*, and quite distinct from the egg of *kilimensis*, which is also larger (Benson, 1951: 110). There may be quite local variations in the breeding season of *famosa*, the season on the Mafinga Mts. perhaps being similar to that on the Vipya Plateau, Malawi, see also Benson (*Bull. Brit. Orn. Cl.*, 1952: 83). On the Nyika, Keith collected three males in full green dress on 26th/30th December, 1964. This problem needs further investigation. Any variation definitely established might be connected with the flowering of particular plants.

Nectarinia kilimensis arturi P. L. Sclater

Vernon found a nest on the Nyika Plateau *ca.* 6,500 feet on 4th January, 1964. It was made of soft plant seed-heads and a little grass, and was conspicuously placed five feet above the ground in rank growth on the edge of evergreen forest. It contained a single young bird, with feather-quills just starting to appear on the wings, spine and flanks, its eyes still closed. This record presumably indicates C/1, as is normal in the nominate race, and there is nothing to indicate more than C/1 in the four records from Malawi in Benson (1951: 110; *Bull. Brit. Orn. Cl.*, 1951: 7). Benson also saw a nest containing a single nestling about half-way to fledging at Dedza, Malawi, 8th July, 1951. Of six records from Rhodesia in Benson *et al.* (1964), five are of C/1, only one of C/2. The odd C/2 is to be expected so far south as Rhodesia.

Ploceus baglafecht nyikae (Benson)

Coll. C/1 infertile, Nyika Plateau *ca.* 6,200 feet, 7th January, 1964 (Vernon). Egg ovate and elongate, smooth but with little gloss; green, boldly spotted with brown; size 24.3 x 14.8 mm. The nest was a kidney-shaped structure of dry grass, lined with soft seed-heads, 12 feet above the ground, built into the outer branch of an *Erythrina* tree. It also contained a young bird about two days old. A fledged juvenile flew out of a nest in an adjacent tree when it was shaken. Benson saw another occupied lone nest on 12th January as low as 6,000 feet. It was in an isolated tree on the edge of a stream, 12 feet above the ground and inaccessible. Males collected on 1st and 10th January had testes measuring respectively 3 x 2, 6 x 4; 5 x 3, 6 x 4 mm. This is the first breeding information for this subspecies, which is only known from the Nyika.

Amblyospiza albifrons maxima Roberts

Coll. C/3 fresh, Katombora, 14th February, 1964, with both parents (Benson). Eggs typical of the species, dull surfaced without gloss; white, with creamy tinge; marked sparingly, and mainly at large end, sometimes smudgily, with burnt amber or Indian red specks and spots, on a very few tiny spots or specks of shades of grey—a few very dark; size 24.6 x 16.3, 22.0 x 16.9, 23.9 x 16.3 mm. The eggs of this subspecies do not appear to have been previously collected. Wing-measurements of the two parents, and of specimens from Barotseland to as far north as Mongu, including material in the National Museum, Bulawayo and the British Museum, are:— six males 99, 100, 101, 103, 106, 107 mm.; one female 95 mm. For measurements of material of *maxima* from the Caprivi Strip, see Benson

(*Occ. Papers Nat. Mus. S. Rhod.*, 23B, 1959: 280). The Barotse specimens include two from as far west as Sinjembele, on the Mashi. A male from 10 miles west of Nangweshi, 30th November, 1963, had testes as large as 8 x 5, 11 x 6 mm., but the nearest suitable aquatic breeding habitat is probably on the Zambezi, at Nangweshi itself.

Tree found a nest containing two young about one week old at the Lukanga/Kafue confluence, 17th February, 1965. For other breeding records from Kafue drainage where, following White (*Revised check list Afr. flycatchers etc.*, 1963: 123), the subspecies is perhaps best regarded as *A. a. albifrons* (Vigors), see Benson (*loc. cit. supra*) and Benson & Pitman (*Bull. Brit. Orn. Cl.*, 1964: 59).

References:

- Benson, C. W. (1951). Breeding and other notes from Nyasaland and the Lundazi district of Northern Rhodesia. *Bull. Mus. Comp. Zool.*, 106(2): 69-114.
- Benson, C. W., Brooke, R. K. and Vernon, C. J. (1964). Bird breeding data for the Rhodesias and Nyasaland. *Occ. Papers Nat. Mus. S. Rhod.*, 27B: 30-105.
- Benson, C. W. and White, C. M. N. (1957). *Check list of the birds of Northern Rhodesia*. Lusaka.
- Friedmann, H. (1964). Evolutionary trends in the avian genus *Clamator*. *Smiths. Misc. Coll'ns*. 146(4).
- Schauensee, R. M. de (1951). Northern Rhodesian birds. *Proc. Acad. Nat. Sci. Philad.*, 103: 23-63.
- Verheyen, R. (1953). *Exploration du Parc National de l'Upemba*. Fasc. 19. Brussels.

Notes on *Icterus chrysocephalus* and *Icterus cayanensis* in Surinam

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In Surinam the distribution of two closely related species of oriole *Icterus chrysocephalus* and *Icterus cayanensis* overlaps.

According to Hellmayr (1937) *I. chrysocephalus* is the more northern bird which inhabits Colombia, the Orinoco Valley in Venezuela, eastern Ecuador, eastern Peru (Ucayali Valley), the Guianas and extreme northern Brazil (upper stretches of the Rio Branco and the Rio Negro). No subspecies have been described.

Icterus cayanensis is a more southern bird and several subspecies are recognised. The nominate race overlaps with *I. chrysocephalus* in the Amazon Valley (it is, however, not clear whether both species inhabit the same localities), in French Guiana and in Surinam, in eastern Peru and apparently also, according to Chubb (1921) in British Guiana. Both species are mainly black and both have yellow wing-coverts and yellow thighs: the sexes are alike. The difference between them is that *chrysocephalus* also has a yellow crown (the forehead is black), a yellow rump and yellow under tail-coverts which are all black in *cayanensis*. There is some confusion in the description of both species in the hand-books. Sclater (1886) for instance omits to say that *chrysocephalus* has a yellow rump and under tail-coverts and that *cayanensis* has yellow thighs.

Chubb (1921) lists only *chrysocephalus* for British Guiana, but his description is partly incorrect as he states that the female lacks the yellow on the crown, rump and thighs which clearly points to *cayanensis*. As he